107TH CONGRESS
2D SESSION

S. 3121

To authorize the Secretary of State to undertake measures in support of international programs to detect and prevent acts of nuclear or radiological terrorism, to authorize appropriations to the Department of State to carry out those measures, and for other purposes.

IN THE SENATE OF THE UNITED STATES

OCTOBER 16, 2002

Mr. BIDEN (for himself, Mr. LUGAR, Mr. DOMENICI, Mrs. CLINTON, Mr. GREGG, and Mr. SCHUMER) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

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A BILL

To authorize the Secretary of State to undertake measures in support of international programs to detect and prevent acts of nuclear or radiological terrorism, to authorize appropriations to the Department of State to carry out those measures, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Nuclear and Radiological Terrorism Threat Reduction Act of 2002''.

SEC. 2. FINDINGS.

Congress makes the following findings:

(1) It is feasible for terrorists to obtain and to disseminate radioactive material using a radiological dispersion device (RDD), or by emplacing discrete radioactive sources in major public places.

(2) It is not difficult for terrorists to improvise a nuclear explosive device of significant yield once they have acquired the fissile material, highly enriched uranium, or plutonium, to fuel the weapon.

(3) An attack by terrorists using a radiological dispersion device, lumped radioactive sources, an improvised nuclear device (IND), or a stolen nuclear weapon is a plausible event.

(4) Such an attack could cause catastrophic economic and social damage and could kill large numbers of Americans.

(5) The first line of defense against both nuclear and radiological terrorism is preventing the acquisition of radioactive sources, special nuclear material, or nuclear weapons by terrorists.

SEC. 3. DEFINITIONS.

In this Act:

(1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term ''appropriate congressional committees'' means the Committee on Foreign Relations

of the Senate and the Committee on International Relations of the House of Representatives.

(2) BYPRODUCT MATERIAL.—The term ''by-product material'' has the same meaning given the term in section 11 e. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)).

(3) IAEA.—The term ''IAEA'' means the International Atomic Energy Agency.

(4) INDEPENDENT STATES OF THE FORMER SOVIET UNION.—The term ''independent states of the former Soviet Union'' has the meaning given the term in section 3 of the FREEDOM Support Act (22 U.S.C. 5801).

(5) NUCLEAR EXPLOSIVE DEVICE.—The term ''nuclear explosive device'' means any device, whether assembled or disassembled, that is designed to produce an instantaneous release of an amount of nuclear energy from special nuclear material that is greater than the amount of energy that would be released from the detonation of one pound of trinitrotoluene (TNT).

(6) RADIOLOGICAL DISPERSION DEVICE.—The term ''radiological dispersion device'' is any device meant to spread or disperse radioactive material by the use of explosives or otherwise.

(7) RADIOACTIVE MATERIAL.—The term ''radioactive material'' means—

(A) source material and special nuclear material, but does not include natural or depleted uranium;

(B) nuclear by-product material;

(C) material made radioactive by bombardment in an accelerator; and

(D) all refined isotopes of radium.

(8) RADIOACTIVE SOURCE.—The term ''radioactive source'' means radioactive material that is permanently sealed in a capsule or closely bonded and includes any radioactive material released if the source is leaking or stolen, but does not include any material within the nuclear fuel cycle of a research or power reactor.

(9) RADIOISOTOPE THERMAL GENERATOR.—The term ''radioisotope thermal generator'' or ''RTG'' means an electrical generator which derives its power from the heat produced by the decay of a radioactive source by the emission of alpha, beta, or gamma radiation. The term does not include nuclear reactors deriving their energy from the fission or fusion of atomic nuclei.

(10) SECRETARY.—The term ''Secretary'' means the Secretary of State.

(11) SOURCE MATERIAL.—The term ''source material'' has the meaning given that term in section 11 z. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(z)).

(12) SPECIAL NUCLEAR MATERIAL.—The term ''special nuclear material'' has the meaning given that term in section 11 aa. of the Atomic Energy Act of 1954 (42 U.S.C. 2014(aa)).

SEC. 4. INTERNATIONAL REPOSITORIES.

(a) AUTHORITY.—The Secretary, acting through the United States Permanent Representative to the IAEA, is authorized to propose that the IAEA conclude agreements with up to five countries under which each country would provide temporary secure storage for orphaned, unused, surplus, or other radioactive sources other than special nuclear material, nuclear fuel, or spent nuclear fuel.

(b) VOLUNTARY CONTRIBUTIONS AUTHORIZED.—

(1) IN GENERAL.—The Secretary is authorized to make a voluntary contribution to the IAEA to fund the United States share of the program authorized by subsection (a) if the IAEA agrees to protect sources under the standards of the United States or IAEA code of conduct, whichever is stricter.

(2) FISCAL YEAR 2003.—The United States share of the costs of the program described in subsection (a) is authorized to be 100 percent for fiscal year 2003.

(c) TECHNICAL ASSISTANCE.—The Secretary is authorized to provide the IAEA, through contracts with the Department of Energy or the Nuclear Regulatory Commission, with technical assistance to carry out the program described in subsection (a).

(d) NONAPPLICABILITY OF NEPA.—The National Environmental Policy Act shall not apply to any activity conducted under this section.

(e) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated for the Department of State $5,000,000 for fiscal year 2003 and $20,000,000 for each fiscal year thereafter to carry out this section.

(2) AVAILABILITY OF FUNDS.—Amounts appropriated pursuant to paragraph (1) are authorized to remain available until expended.

SEC. 5. RADIOACTIVE SOURCE DISCOVERY, INVENTORY, AND RECOVERY.

(a) AUTHORITY.—The Secretary is authorized to make United States voluntary contributions to the IAEA

to support a program to promote radioactive source discovery, inventory, and recovery.

(b) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to the Department of State $5,000,000 for each of the fiscal years 2003 through 2012 to carry out subsection (a).

(2) AVAILABILITY OF FUNDS.—Amounts appropriated pursuant to paragraph (1) are authorized to remain available until expended.

SEC. 6. RADIOISOTOPE THERMAL GENERATOR-POWERED FACILITIES IN THE INDEPENDENT STATES OF THE FORMER SOVIET UNION.

(a) RTG POWER UNITS.—The Secretary is authorized to assist the Government of the Russian Federation to substitute solar (or other non-nuclear) power sources to replace RTG power units operated by the Russian Federation and other independent states of the former Soviet Union in applications such as lighthouses in the Arctic, remote weather stations, unattended sensors, and for providing electricity in remote locations. Any replacement shall, to the maximum extent practicable, be based upon tested technologies that have operated for at least one full year in the environment where the replacement will be used.

(b) ALLOCATION OF FUNDS.—Of the funds made available to carry out this section, the Secretary may use not more than 20 percent of the funds in any fiscal year to replace dangerous RTG facilities that are similar to those described in subsection (a) in countries other than the independent states of the former Soviet Union.

(c) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to the Department of State $10,000,000 for each of the fiscal years 2003, 2004, and 2005 to carry out this section.

(2) AVAILABILITY OF FUNDS.—Amounts appropriated pursuant to paragraph (1) are authorized to remain available until expended.

SEC. 7. FOREIGN FIRST RESPONDERS.

(a) IN GENERAL.—The Secretary is authorized to conclude an agreement with a foreign country, or, acting through the United States Permanent Representative to the IAEA, to propose that the IAEA conclude an agreement with that country, under which that country will carry out a program to train first responders to—

(1) detect, identify, and characterize radioactive material;

(2) understand the hazards posed by radioactive contamination;

(3) understand the risks encountered at various dose rates;

(4) enter contaminated areas safely and speedily; and

(5) evacuate persons within a contaminated area.

(b) UNITED STATES PARTICIPATION.—The Department of State is hereby designated as the lead Federal entity for cooperation with the IAEA in implementing subsection (a) within the United States. In carrying out activities under this subsection the Secretary of State shall take into account the findings of the threat assessment report required by section 8 and the location of the interim storage facilities under section 4.

(c) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated to the Department of State $2,000,000 for fiscal year 2003, $5,000,000 for fiscal year 2004, and $5,000,000 for fiscal year 2005 to carry out this section.

(2) AVAILABILITY OF FUNDS.—Amounts appropriated pursuant to paragraph (1) are authorized to remain available until expended.

SEC. 8. THREAT ASSESSMENT REPORT.

(a) IN GENERAL.—Not later than 180 days after the date of enactment of this Act, and annually thereafter, the Secretary of State shall submit a report to the appropriate congressional committees—

(1) detailing the preparations made at United States diplomatic missions abroad to detect and mitigate a radiological attack on United States missions and other United States facilities under the control of the Secretary; and

(2) setting forth a rank-ordered list of the Secretary's priorities for improving radiological security and consequence management at United States missions, including a rank-ordered list of the missions where such improvement is most important.

(b) BUDGET REQUEST.—The report shall also include a proposed budget for the improvements described in subsection (a)(2).

(c) FORM OF SUBMISSION.—The report shall be unclassified with a classified annex if necessary.

SEC. 9. SPECIAL REPRESENTATIVE FOR INSPECTIONS OF NUCLEAR AND RADIOLOGICAL MATERIALS.

Section 1 of the State Department Basic Authorities Act of 1956 (22 U.S.C. 2651a) is amended by adding at the end the following new subsection:

''(h) SPECIAL REPRESENTATIVE FOR INSPECTIONS OF NUCLEAR AND RADIOLOGICAL MATERIALS.—

''(1) ESTABLISHMENT OF POSITION.—There shall be within the Bureau of the Department of State primarily responsible for nonproliferation matters a Special Representative for Inspections of Nuclear and Radiological Materials (in this subsection referred to as the 'Special Representative'), who shall be appointed by the President, by and with the advice and consent of the Senate. The Special Representative shall have the rank and status of ambassador.

''(2) RESPONSIBILITIES.—The Special Representative shall have the primary responsibility within the Department of State for assisting the Secretary of State in negotiating international agreements that ensure inspection of cargoes of nuclear and radiological materials destined for the United States at ports of embarkation, and such other agreements as may control radioactive materials.

''(3) COOPERATION WITH UNITED STATES CUSTOMS SERVICE.—In carrying out the negotiations described in paragraph (2), the Special Representative shall cooperate with, and accept the assistance

and participation of, appropriate officials of the United States Customs Service.''.

SEC. 10. RESEARCH AND DEVELOPMENT GRANTS.

(a) IN GENERAL.—Subject to the availability of appropriations, there is established a program under which the Director of the National Science Foundation shall award grants for university-based research into the detection of fissile materials, identification of radioactive isotopes in real time, the protection of sites from attack by radiological dispersion device, mitigation of consequences of such an attack, and attribution of materials used in attacks by radiological dispersion device or by improvised nuclear devices. Such grants shall be available only to investigators at baccalaureate and doctoral degree granting academic institutions. In carrying out the program, the Director of the National Science Foundation shall consult about this program with the Secretary of Energy in order to minimize duplication and increase synergies. The consultation shall also include consideration of the use of the Department of Energy to develop promising basic ideas into field-ready hardware. The Secretary of Energy shall work with the national laboratories and industry to develop field-ready prototype detectors.

(b) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There is authorized to be appropriated to the National Science Foundation $10,000,000, and to the Department of Energy $5,000,000, to carry out this section in fiscal years 2003 through 2008.

(2) AVAILABILITY OF FUNDS.—Amounts appropriated pursuant to paragraph (1) are authorized to remain available until expended.

SEC. 11. STUDY AND REPORTS BY THE NATIONAL ACADEMY OF SCIENCES.

(a) STUDY.—Not later than 90 days after the date of enactment of this Act, the Secretary, in consultation with the Chairman of the Nuclear Regulatory Commission, acting through a contract with the National Academy of Sciences, shall conduct a study of the use of radioactive sources in industry and of potential substitutes for those sources.

(b) REPORTS.—Not later than six months after entry into the contract referred to in subsection (a), the National Academy of Sciences shall submit an initial report to the Secretary and the appropriate congressional committees and, not later than three months after submission of the initial report, shall submit to the Secretary and those committees a final report.

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